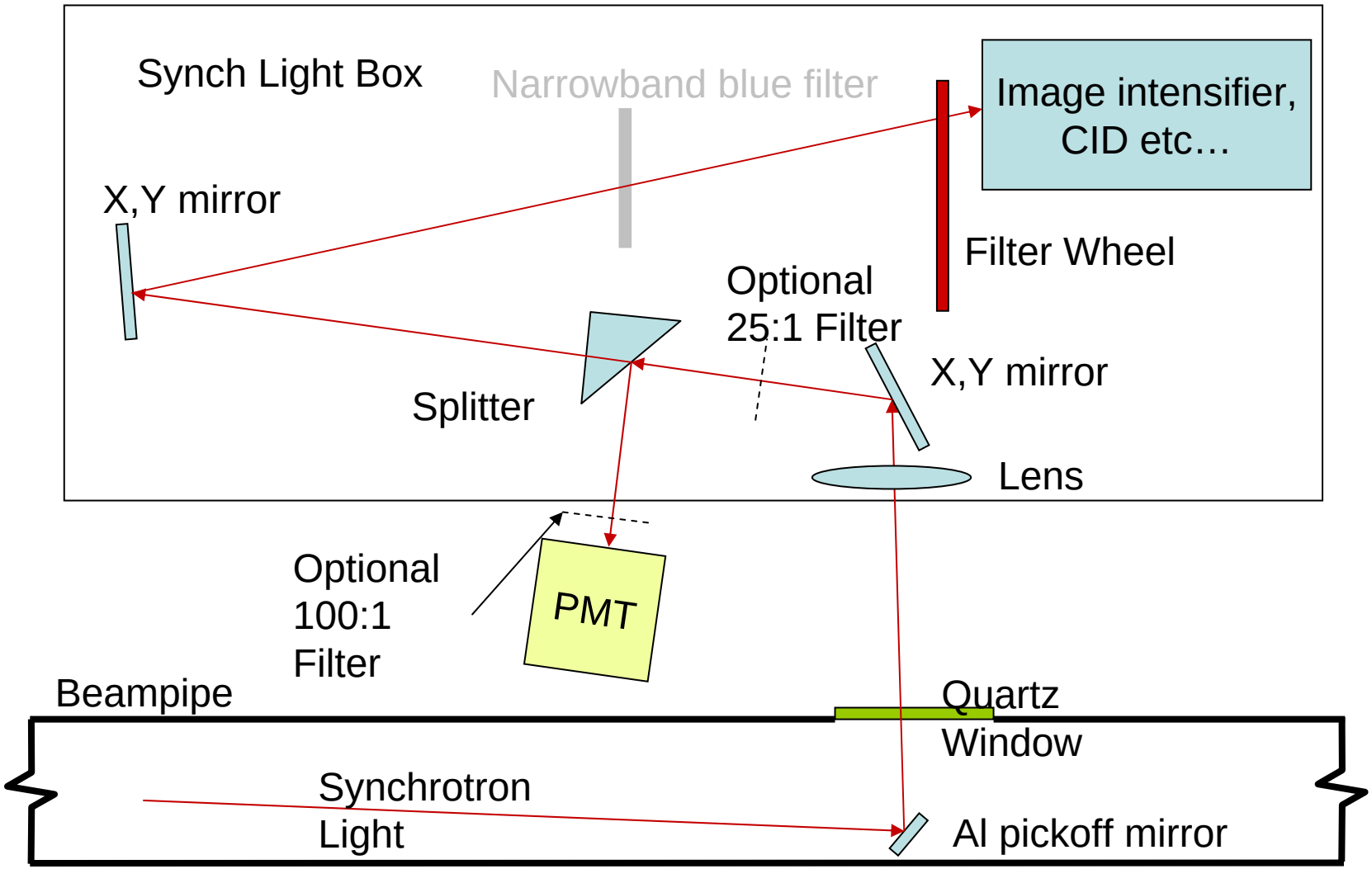
Synclite Status

- Replaced…
  - ✓ Motor controllers for mirror motion (not pickoff mirror)
    - Now controlled from PC (instead of Mac)
  - ✓ Image intensifiers
  - ✓ Intensifier pulser
    - Proton and antiproton are now separate (2 pulsers)
- Installed motorized filter wheel to facilitate diffraction measurement
  - Removed existing 400 ± 20 nm filter
  - Will use 400 ± 5 nm filter in wheel
- Obtained synchrotron light simulation (SRW)
  - Does synchrotron light calculation and propagation through optical systems
- Pbar pickoff mirror in sequencer???

Synclite Status



Synclite Study Plans

- Width variations with intensity (instrumentation effects)
  - Vary MCP voltage
  - Vary intensifier gate width during uncoalesced beam (parasitic)
  - Insert attenuator
- Gain variations (require large intensity variation among proton bunches)
  - Pbars can be done during HEP
- Pickoff mirror position / camera focusing
- Distance scale calibration (4 bump p + pbar)
- Diffraction study (parasitic, but synclite unavailable during study)
  - Measure at 4 wavelengths (360nm, 440nm, 530nm, 620nm ± 5nm)
  - Use synchrotron light simulation to help understand diffraction measurements

Abort Gap Monitor

- Synclite and AGI are now synchronous (no more crosstalk)
- Readout glitch fixed (less noise)
- Point-to-point integrator pedestal shifts will be accounted for by taking just integrator sample along with PMT data